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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/778,879	02/08/2001	Yasuhiko Kunii	1466.1028	6729

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EXAMINER

TRUONG, BAO Q

ART UNIT	PAPER NUMBER
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2875

DATE MAILED: 06/11/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/778,879

Applicant(s)

KUNII ET AL.

Examiner

Bao Q. Truong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 February 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3. 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Specification***

1. The disclosure is objected to because of the following informalities:

“im” should be changed to  $\mu\text{m}$  on page 6 line 19, page 7 lines 10 and 12, page 11 line 5.

The examiner could not find in specification why is the height being more than 5% of the maximum height.

Appropriate correction is required.

### ***Priority***

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Objections***

3. Claims 2, 4, 5, 6, 8, 9 and 10 are objected to because of the following informalities:

Claim 2, there is lack antecedent basic for “the maximum height”.

Claim 4, there are lack antecedent basics for “the display surface”, “the row direction side” and “the column direction side”.

Claim 5, there is lack antecedent basic for “the plan view pattern” and “other portions”.

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Claim 6, the applicant recited "a plan view pattern". Is it different from "the plan view pattern" as recited in claim 5?

Claim 8, there is lack antecedent basic for "the back substrate".

Claim 9, what does "that" on line 4 refer to? There is lack antecedent basic for "the other portion of the partition".

Claim 10, there is lack antecedent basic for "the ring-shaped pattern".

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

5. Claims 1 and 4-9, are rejected under 35 U.S.C. 102(e) as being anticipated by Sano et al. [US 6,249,264].

Regarding claim 1, Sano et al. disclose two substrates [11 and 21], a discharge gas, patterned partition members [29 and 50], a discharge space [30] as a cell (figures 4 and 8, column 20, lines 27-45, lines 58-62, column 25, lines 5-10 and column 26, lines 20-30).

Regarding claim 4, Sano et al. disclose a phosphor-emitting layer [28] (figure 4).

Regarding claim 5, Sano et al. disclose patterned partition members [29 and 50] and heights  $h < H$  (figures 4 and 8).

Regarding claim 6, Sano et al. disclose a partition member [50] enclosing a space of a partition member [29] (figure 8).

Regarding claim 7, Sano et al. disclose partition members [29 and 50] being a ladder pattern (figure 8).

Regarding claim 8, Sano et al. disclose partition members [29 and 50] being on a back substrate [21], a transparent electrode [41] and a metal electrode [42] (figure 4, column 21, lines 39-42).

Regarding claim 9, Sano et al. disclose a width  $L$  of a member [50] being wider than a width of a member [29] (figures 8 and 9).

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sano et al. as applied to claim 1 above.

Regarding claims 2 and 3, Sano et al. disclose a height of member [29] being  $H$  and a height of member [50] being  $h$ , and  $h < H$  (figures 4 and 8). Sano et al. do not

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disclose the specific difference (H-h) being more than 5% of H and the specific difference (H-h) being greater than  $10^{-6}$  m.

It would have been obvious to one having ordinary skill in the art to design the specific difference height (H-h), since applicant has not disclosed that with the specific difference height solves any new stated problem and it appears that the invention would perform equally well with the height members [29 and 50].

8. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sano et al. as applied to claim 1 above, and further in view of Murai et al. [US 5,754,003].

Regarding claim 10, Sano et al. do not disclose a specific step to manufacturing a plasma display panel.

Murai et al. disclose a process of producing a plasma display panel with partition walls having a step of forming a plurality of partition walls and a step of heat-treating (column 5, lines 9-27).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use a method of Murai et al. in order to reduce cost.

Regarding claim 11, Sano et al. disclose a forming a mask by sand blast method (column 9, lines 10-32).

**Conclusion**

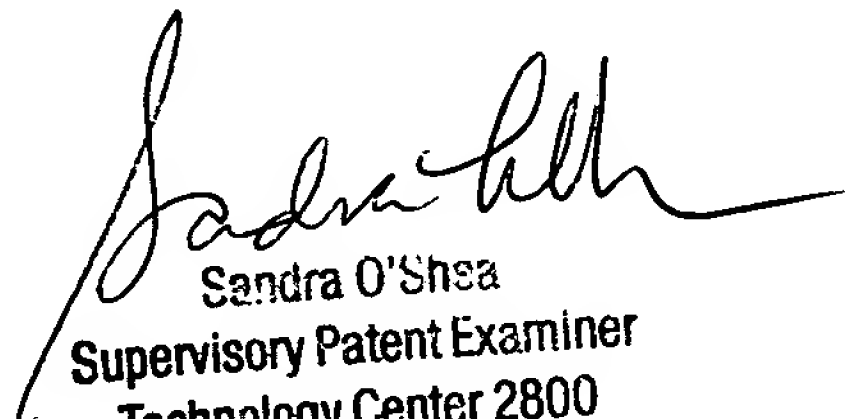
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bao Q. Truong whose telephone number is (703) 308-6452. The examiner can normally be reached on Monday-Friday (8:00 AM - 5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra L. O'Shea can be reached on (703) 035-4939. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7725 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308 0956.

Bao Q. Truong  
Examiner  
Art Unit 2875

BQT  
June 5, 2002

  
Sandra O'Shea  
Supervisory Patent Examiner  
Technology Center 2800